

MATERIAL SAFETY DATA SHEET

Date Issued: 7/8/2003 Supercedes: 7/15/2002

I. Identification of the Substance/Preparation and the of the Company/Undertaking

Identification of the product

Product Name:

Bonder

Company/undertaking identification:

Company:

Odyssey Nail Systems, Inc.

6498 Wilcrest Dr

Houston, TX 77072

Phone 1 407 522 5700

Fax 1 407 522 5788

Emergency Contact Information

1 407 383-2662

II. Composition on Ingredients

Synonyms: Acrylated urethane / acetone blend

	CAS #	WT%	OSHA TWA ppm	OSHA STEL ppm	CGIH TWA ppm	ACGIH STEL ppm
Isopropanol	67-63-0	40	---	---	---	---
Acetone	67-64-1	35	---	---	---	---
Urethane Diacrylate	215955-03-6	25	---	---	---	---
Photoinitiator	947-19-3	0.5	---	---	---	---

--- Not established

*** The specific chemical identity and/or weight percent is being withheld as a trade secret

III. Hazard Identification

Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness, cracking or rash. Vapors may cause drowsiness and dizziness.

IV. First Aid Measures

Eye Contact: Flush with plenty of water for at least 15 minutes and seek medical attention.

Skin Contact: Remove contaminated clothing and wash contact area with soap and water for 15 minutes. Particular attention should be paid to hair, nose, ears and other areas not easily cleaned. See section VIII . Note to physician: effects can be delayed 24-48 hours.

Ingestion: If appreciable quantities are swallowed, seek medical attention.

Inhalation: In case of exposure to a high concentration of vapor or mist, remove person to fresh air. If breathing has stopped, administer artificial respiration and seek medical attention

V. Fire-Fighting Measures

Extinguishing Media:

Use carbon dioxide or dry chemical for small fires; aqueous foam or water for large fires

Unusual Fire and Explosion Hazards:

High temperatures and fire conditions may cause rapid and uncontrolled polymerization which can result in explosions and and the violent rupture of storage vessels and containers. Avoid the use of a stream of water to control fires since frothing can occur.

Special Fire Fighting Procedure:

Remove all ignition sources. Wear self-contained breathing apparatus and complete personal protective equipment when entering confined area where potential for exposure to vapors or products of combustion exists.

VI. Accidental Release Measures

Steps to Be Taken in Case Material is Released or Spilled:

Spontaneous polymerization can occur. Eliminate ignition & heat sources. Use eye and skin protection. Place leaking containers in a well ventilated area. Absorb with inert material and dispose. Flush area with water; prevent washings from entering waterways. Spills or releases to the environment may be reportable to the National Response Center (800- 424-8802) and to state and local agencies.

Waste Disposal Method:

For large spills: incinerate or use biological treatment in accordance with federal, state and local regulations. For small spills: cure using UV light or peroxide and dispose in accordance with federal, state and local regulations.

VI. Handling & Storage

Stability: Normally Stable

Conditions to Avoid:

Storage >100F, exposure to light, loss of dissolved air, loss of polymerization inhibitor, contamination with incompatible materials.

Materials to Avoid:

Polymerization initiators including peroxides, strong oxidizing agents, copper, copper alloys, carbon steel, iron, rust and strong bases.

Hazardous Decomposition Products:

Fumes produces when heated to decomposition may include: carbon monoxide, carbon dioxide, oxides of nitrogen.

VIII. Exposure Controls/Personal Protection

Respiratory Protection:

When exposed to aerosols or vapors, use full-face respirator with organic vapor cartridges that utilize a particulate pre-filter. In emergency situations, or when used in confined spaces, use self-contained breathing apparatus or other air-supplied full face respirator.

Ventilation:

Local exhaust - recommended to control exposure which may result from operations generating

Mechanical – Not recommended to control exposure for operations generating aerosols or vapors.

Protective Gloves:

Impervious gloves (neoprene). A combination of barrier cream, applied before exposure, and gloves is recommended. Do not apply cream after exposure.

Eye Protection:

Chemical splash goggles or safety glasses when handling large quantities.

Other Protective Equipment:

None

IX. Physical and Chemical Properties:

Manufacturer's ID:

Bonder

Form:

liquid

Product Class:	Acrylated urethane / acetone blend	Color:	colorless
Boiling Range:	56.2 °C	Percent Volatile by Volume:	75
Vapor Density:	2.01		
VOC:	0.0	Weight Per Gallon:	7.1 lbs
Evaporation Rate:	> 1	Vapor Pressure at 20C:	233 hPa
Appearance and Odor:	Clear liquid with ketone odor	Solubility in Water:	soluble
Flashpoint:	<-20 °C Closed Cup		
Explosion Limits:	LEL: 2.6 Vol %	UEL: 13 Vol %	

X. Stability and Reactivity

Stability: Normally Stable

Hazardous Polymerization:

May occur – uncontrolled polymerization may cause rapid evolution of heat and increased pressure that could result in violent rupture of sealed storage vessels or containers.

Conditions to Avoid:

Storage >100F, exposure to light, loss of dissolved air, loss of polymerization inhibitor, contamination with incompatible materials.

Materials to Avoid:

Polymerization initiators including peroxides, strong oxidizing agents, copper, copper alloys, carbon steel, iron, rust and strong bases.

Hazardous Decomposition Products:

Fumes produces when heated to decomposition may include: carbon monoxide, carbon dioxide, oxides of nitrogen.

XI. Toxicological Information

Health Hazards: See section V

Ingestion: LD₅₀ (oral, rat): 5800 mg/kg.

Inhalation: LD₅₀ (inhalation, rat): 76 mg/l/4h.

Skin Contact: LD₅₀ (dermal, rabbit): 20000 mg/kg.

Allergy Sensitization: Mild skin and eye sensitization may be observed upon continued overexposure

Carcinogenicity: Category E (evidence of non-carcinogenicity for humans)

Mutagenicity: Negative in all tests

XII. ECOLOGICAL INFORMATION

Biologic Degredation: Biodegradation: 91% / 28 days Readily biodegradable

Behavior in environmental compartments: Distribution: log p(o/w): -0.24 no bioaccumulation to be expected

Ecotoxic effects:

Biological effects:

Fish toxicity: L. macrochirus LC₅₀: 8300 mg/l/96 hr

Daphnia toxicity: Daphnia magna EC₅₀:12600-12700 mg/l/48 hr

Maximum permissible toxic concentrations:

Algeal toxicity: Sc. Quadricauda ICs: 7500 mg/l/8 d

Bacterial toxicity: M. aeruginosa ECs: 530 mg/l/8 d; Ps. Putida ECs: 1700 mg/l/16 hr

Protazoa: E. sulcatum ECs: 28mg/l/72 hr

Further ecological data:

Degradability:

BOD₅: 1.85 g/g

COD: 2.07 g/g

TOD: 2.20 g/g

XIII. DISPOSAL INFORMATION

Product: Chemicals must be disposed of in compliance with federal, state and local regulations.

Container: Container must be disposed of in accordance with federal, state and local regulations.

XIV. Transportation Information

D.O.T. Shipping Name: ORM-D

D.O.T. Hazard Class: Acetone

D.O.T. Label(s): ORM-D for small containers for retail sale, Flammable Liquid NOS, Acetone / Isopropanol Mixture for gallon or larger sizes

D.O.T. UN/NA Number: Acetone Isopropanol NOS, 3, UN 1993, II

XV. Regulatory Information

In The EU:

Classification and Labeling (according to 88/379/EEV as amended): None

Threshold Limit Value:	OSHA PEL (USA) n.a.	ACGIH TLV (USA) n.a.	MAK (Germany) n.a.	HGV (Denmark) n.a.	Others ---
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Product Name: See section I

Active Ingredient: urethane acrylate

EPA Reg. No. n.a.

XVI. Other Information

All of the components of this product are included on the TSCA inventory

INVENTORY STATUS:

Australia (AICS): Included on inventory

Canada (DSL): Included on inventory

European Economic Community (EINECS): Included on inventory

Japan (MITI): Included on inventory

Korea (MOE): Included on inventory